

## TM SERIES (WATER METERS)

**FLOMEC® TM Series Water Meters** are accurate, economical and designed to last. Choose TM Water Meters for water processing and irrigation applications:

- Meets Schedule 80 PVC specifications
- Standard low-profile display
- Seven sizes with three fitting types available
- Flow rates from 1 to 600 gallons per minute (3.8 to 2271 L/min)

## FEATURES / BENEFITS

- Easy to install
- Displays in gallons, litres and cubic feet
- Indicates Batch, Cumulative Totals and Rate of Flow
- Available in Spigot, NPT, BSP (1 in., 1-½ in. and 2 in. only), 150# ANSI Flange (3 in. and 4 in. only) and DIN Flange (3 in. and 4 in. only) fittings
- Non-volatile totals means amounts are retained when batteries are replaced or power is lost
- Alkaline battery life: 2 years

## APPLICATIONS

- OEM water treatment equipment / skids
- Sub-metering of facility water usage
- Waste water treatment equipment
- Irrigation
- Batching
- Plant process water
- Water based cooling systems
- Chemical feed systems
- Monitoring clean fluids
- Cooling towers
- Blending

# FLOMEC®

## PRODUCT CONFIGURATION

### 1 PRODUCT IDENTIFIER:

**TM** = TM Series Water Meters

### 2 TURBINE SIZE:

**05** = ½ in.                      **20** = 2 in.  
**07** = ¾ in.                      **30** = 3 in.  
**10** = 1 in.                      **40** = 4 in.  
**15** = 1-½ in.

### 3 METER PORT CHOICE:

**N** = NPT, Female (Available In All Sizes)  
**B** = BSP, Female (1 in., 1-1/2 in., 2 in. Only)  
**F** = Flange, ANSI (3 in., 4 in. Only)  
**D** = Flange, DIN (3 in., 4 in. Only)  
**S** = Spigot (Available In All Sizes)

*No Meter - Electronics Only*

**X** = No Meter - Use With X9 Electronics Only (Q9 Computer Replacement Kit)

### 4 ELECTRONIC CHOICE:

*Local Computer w/Display, Meter Mounted*

**Q9** = Q9 2-Button Computer

**Q1** = Q9 2-Button Computer, Vertical Mount (90° Adapter)

*Local Computer w/Display & Module, Meter Mounted*

**P9** = Q9 2-Button Computer w/Pulse Out Module, includes External Power and 10 ft. of Cable

**42** = Q9 2-Button Computer w/4-20mA Module and 10 ft. of Cable

*Module, Meter Mounted (No Display)*

**PO** = Pulse Out Conditioned Signal Module w/Cable

*Replacement Computer Kit (Display Only)*

**X9** = Q9 2-Button Computer Replacement Kit

*Retrofit Computer Kit (Display Only)*

**R9** = Q9 2-Button Computer Retrofit Kit (Replaces Q9 Display)

*No Electronics - Turbine Only*

**XX** = No Electronics - Turbine Only

### 5 CALIBRATION OF COMPUTER / DISPLAY:

**GM** = Gallons Per Minute (For Use With Q9, P9, 42, X9, R9 Electronics Only)

**LM** = Liters Per Minute (For Use With Q9, P9, 42, X9, R9 Electronics Only)

**XX** = No Calibration (Use With PO & XX Electronics Only)

### 6 PACKAGING:

**A** = 05 Thru 10 Turbine Only  
05 Thru 10 Turbine w/Q9 Electronics  
X9 & R9 Electronics Kit (Replacement Computer)

**B** = 15 Thru 20 Turbine Only  
15 Thru 20 Turbine w/Q9 Electronics

**C** = 05 Thru 20 Turbine w/P9, 42, PO Electronics

**D** = 30N, 30S Turbine Only  
30N, 30S Turbine w/Q9, P9, 42, PO Electronics  
40S Turbine Only  
40S Turbine w/Q9, P9, 42, PO Electronics

**E** = 30F, 30D Turbine Only  
30F, 30D Turbine w/Q9, P9, 42, PO Electronics  
40N, 40F, 40D Turbine Only  
40N, 40F, 40D Turbine w/Q9, P9, 42, PO Electronics

1 2 3 4 5 6  
--->>>> TM 10 N Q9 GM A

## DIMENSIONS

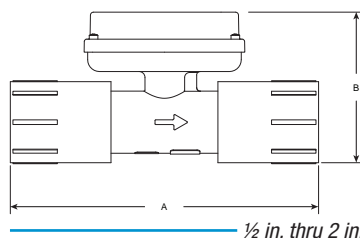
Meter Size & Fitting	Length	Height	Width
05 Spigot	4.3 in. (109 mm)	2.5 in. (63 mm)	2.1 in. (53 mm)
05 NPT	6.0 in. (152 mm)	2.7 in. (68 mm)	2.1 in. (53 mm)
07 Spigot	4.4 in. (112 mm)	2.7 in. (68 mm)	2.1 in. (53 mm)
07 NPT	6.1 in. (155 mm)	2.9 in. (73 mm)	2.1 in. (53 mm)
10 Spigot	4.5 in. (114 mm)	2.9 in. (73 mm)	2.1 in. (53 mm)
10 NPT / BSP	6.5 in. (165 mm)	3.1 in. (79 mm)	2.1 in. (53 mm)
15 Spigot	5.4 in. (137 mm)	3.6 in. (91 mm)	2.1 in. (53 mm)
15 NPT / BSP	7.6 in. (193 mm)	3.8 in. (96 mm)	2.3 in. (58 mm)

Meter Size & Fitting	Length	Height	Width
20 Spigot	5.5 in. (140 mm)	4.1 in. (104 mm)	2.4 in. (61 mm)
20 NPT / BSP	7.9 in. (200 mm)	4.4 in. (112 mm)	3.5 in. (89 mm)
30 Spigot	11.5 in. (292 mm)	5.34 in. (136 mm)	3.5 in. (89 mm)
40 Spigot	13.5 in. (343 mm)	6.34 in. (161 mm)	4.5 in. (114 mm)

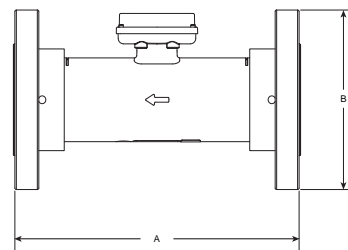
Meter Size & Fitting	Length	Height	Width
30 NPT	14.7 in. (373 mm)	5.78 in. (147 mm)	4.37 in. (111 mm)
40 NPT	17.0 in. (432 mm)	6.7 in. (170 mm)	5.87 in. (149 mm)
30 ANSI Flange	12.0 in. (305 mm)	7.5 in. (190 mm)	7.5 in. (190 mm)
40 ANSI Flange	14.0 in. (356 mm)	9.0 in. (229 mm)	9.0 in. (229 mm)

Length guidelines are estimates; actual length can vary up to  $\pm \frac{1}{2}$  in. (13 mm).

P9 & 42 Electronics adds 0.90 in. (23 mm) to height.



$\frac{1}{2}$  in. thru 2 in.



3 in. & 4 in.

## SPECIFICATIONS

Fitting Type:	Schedule 80 Spigot (Pipe) End	
	NPT (Female)	
	BSP (Female) (1 in., 1-1/2 in., & 2 in. meters only)	
	150# ANSI Flange or DIN 100 Flange (3 in. & 4 in. meters only)	
Meter Sizes Available:	$\frac{1}{2}$ in., $\frac{3}{4}$ in., 1 in., 1-1/2 in., 2 in., 3 in., 4 in.	
Flow Range:	$\frac{1}{2}$ in. (05)	1 - 10 GPM (3.8 - 38 L/min)
	$\frac{3}{4}$ in. (07)	2 - 20 GPM (7.6 - 76 L/min)
	1 in. (10)	5 - 50 GPM (19 - 190 L/min)
	1-1/2 in. (15)	10 - 100 GPM (38 - 380 L/min)
	2 in. (20)	20 - 200 GPM (76 - 760 L/min)
	3 in. (30)	40 - 400 GPM (151 - 1514 L/min)
	4 in. (40)	60 - 600 GPM (227 - 2271 L/min)
Accuracy (% of Reading):	$\pm 3.0\%$	
Pressure Rating ( $\frac{1}{2}$ - 2 in.):	225 psi (15.3 bar) @ 73° F (23° C)	
BSP	150 psi (10.3 bar) @ 73° F (23° C)	
Pressure Rating (3 - 4 in.):	225 psi (15.3 bar) @ 73° F (23° C)	
DIN	135 psi (9.1 bar) @ 73° F (23° C)	
For CE Applications	135 psi (9.1 bar) @ 73° F (23° C)	
Operating Temperature Range:	+32° F to +140° F (0° C to +60° C)**	

Typical K-Factor:	$\frac{1}{2}$ in. (05)	2,500 PPG (660 Pulses/L)
	$\frac{3}{4}$ in. (07)	1,100 PPG (291 Pulses/L)
	1 in. (10)	565 PPG (149 Pulses/L)
	1-1/2 in. (15)	215 PPG (57 Pulses/L)
	2 in. (20)	100 PPG (26 Pulses/L)
	3 in. (30)	43 PPG (11 Pulses/L)
	4 in. (40)	17 PPG (4.5 Pulses/L)
Wetted Materials ( $\frac{1}{2}$ - 2 in.):	Housing:	PVC
	Bearings:	96% Alumina Ceramic
	Shaft:	Tungsten Carbide
	Rotor:	PVDF
	Rings:	316 Stainless Steel
Wetted Materials (3 - 4 in.):	Housing:	PVC
	Bearings:	PEEK
	Shaft & Thrust Washers:	Stainless Steel
	Rotor & Nose Cone:	Acetal
	Signal Generator:	Ferrite
Calibration Certificate:	N.I.S.T. - Certification available	

\*\*PVC pressure rating will incrementally decrease above 73° F (23° C).

## ELECTRONICS OPTIONS

**Q9** = Standard Local Display with 2 Totals and Rate of Flow

**Q1** = The Standard Q9 Display, turned 90° for a vertically installed meter body

**P9** = Pulse Output Module installed between the local display and the meter body

- Provides a Scaled NPN Open Collector Pulse
- Can provide External Power to the local display
- Comes with 10 ft. of installed cable

**42** = 4-20 mA Module installed between the local display and the meter body

- Provides a 4-20 mA signal
- Provides a Scaled NPN Open Collector Pulse
- Comes with 10 feet of installed cable

**PO** = Pulse Output Module installed in place of the display (blind meter)

- Provides an Unscaled NPN Open Collector Pulse

**X9** = Replacement Q9 Computer Display for a meter body that already has a Q9 display

**R9** = Replacement Q9 Computer Display for a meter body that has an old Q9 display

- Come with the extra parts required to retrofit a Q9 display in place of a Q9 display

## ACCESSORIES

Part No.	Description
113275-10	FM Approved Remote Kit - Q9 Display (will not make meter FM Approved)
125260-02	90° Display Adapter Kit - Q9 Display

APPROVALS



\*NSF approval for 3 & 4 in. sizes only

Wichita · Sydney

GREAT PLAINS INDUSTRIES



**Service & Warranty:** For technical assistance, warranty replacement or repair contact your **FLOMEC®** or **GPI®** distributor:

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